

English as a foreign language teachers' attitudes toward artificial intelligence in education

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ABSTRACT

This study investigates the attitudes of English as a foreign language (EFL) teacher toward the integration of artificial intelligence (AI) in education within the private school sector in Vietnam. It addresses a critical research gap by focusing on private multi-level institutions, which often lead digital shifts but remain under-researched regarding practitioner perspectives. Using a convergent mixed-methods design, data were collected from fifteen teachers across various educational levels through a validated Likert-scale questionnaire and open-ended questions. The findings reveal that while teachers hold generally positive attitudes, characterized by high interest and recognition of the usefulness of artificial intelligence for lesson planning and real-time feedback, significant concerns persist. These concerns include potential ethical risks, learner over-reliance, misinformation, and the possible erosion of human connection in the classroom. The study concludes that teacher acceptance is conditional, appearing more favorable in low-stakes instructional applications where pedagogical control is maintained. Consequently, professional development programs must provide both technical and emotional support while establishing clear, age-appropriate policies to ensure that technology enhances rather than replaces human-centered pedagogy.

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1. INTRODUCTION

The introduction of artificial intelligence (AI) into the field of education has reshaped teaching and learning practices. One of the earliest uses of AI in education was the development of intelligent tutoring systems, which provide personalized feedback to students on their performance. Later, AI was also applied to data analysis, such as monitoring students' grades, attendance, and performance trends [1]. These applications help maximize the efficiency of both teaching and learning [2]. However, studies have indicated that stakeholders, including teachers, hold contradictory attitudes towards the use of AI in education. While positive attitudes can encourage the use of AI and enhance performance outcomes, negative attitudes may reduce the willingness to adopt these advanced technologies [3].

Therefore, this study aimed to examine the attitudes of English as a foreign language (EFL) teacher towards the use of AI in education in the context of private schools in Vietnam. Education in Vietnam has long been affected by teacher-centered teaching method before a national strategy for digital transformation to participate in the Fourth Industrial Revolution which leads to the change to students-centered approach and technology integration into practice. In 2025, Ministry of Education and Training introduced the Digital

Competence Framework for students with the inclusion of AI competence emphasizing top-down policy mandate. However, while the policy is set at the macro level, the attitudes of the teachers expected to implement these changes remain under-researched. This disconnection between policy and practitioner perspective poses a risk to the successful integration of AI. Additionally, private schools are an increasingly important segment of the system, often responding more rapidly than the public sector to digital shifts and infrastructure needs. Hence, these institutions are vital for studying on the attitudes of teachers towards AI.

2. LITERATURE REVIEW

2.1. Definitions of AI

Artificial intelligence is a branch of computer science that focuses on the creation of software systems that mimic certain human-like cognitive processes, including thinking, reasoning, learning, and self-correction [4]–[7]. AI can be divided into two main types, including narrow AI, which is designed to complete specific tasks such as translation or playing chess, and general AI, which is designed to perform human-like intelligence [8]. In a more specific categorization, Pedro *et al.* [9] identified four dimensions of AI, including thinking humanly, acting humanly, thinking rationally, and acting rationally. Humanly-oriented AI attempts to emulate human performance, while rationally-oriented AI aims to optimize performance based on logical principles. “Thinking” refers to internal cognitive processes, whereas “acting” refers to observable behavior. Since its first introduction at the Dartmouth Conference in 1956, AI has continued to evolve and now encompasses various scientific disciplines such as psychology, engineering, biology, and education [6], [9].

2.2. Applications of AI in education

In education, AI is being applied in diverse areas ranging from administration and instruction to the learning process itself [10]. For teachers, AI supports the design of scaffolding, teaching and learning activities, as well as assessment [2]. AI also serves as an assistant by helping teachers assess students’ work, thereby saving valuable time [9]. For students, AI facilitates personalization and fosters better learning outcomes through multiple forms of support. Firstly, it promotes collaborative learning, enabling students to engage in discussions through AI tools without the need to be physically present in the same place. Secondly, it supports personalized learning by mapping individual students’ progress and tailoring learning plans accordingly. Thirdly, it supports personalized learning promoting the development of learning outcomes [2], [9]. Because of the rapid development of AI, the definitions have changed with the time [5]. In this study, AI is interpreted as any system that mimics certain cognitive process including thinking rationally, acting rationally, thinking humanly, and acting humanly [4], [9].

2.3. Attitudes

Newcomb *et al.* [11] proposed that attitude comprises three components: the affective component, which refers to emotions and feelings; the cognitive component, which refers to thoughts, beliefs, and knowledge; and the behavioral component, which refers to the tendency to act. The behavioral component is shaped by the affective and cognitive components in combination with situational factors. To measure general attitudes towards artificial intelligence, several scales have been developed, ranging from short to long item lists. One prominent short version is the attitudes towards artificial intelligence scale (ATAI), developed by Sindermann *et al.* [6]. The authors aimed to design a brief and reliable tool to assess individual attitudes towards AI. The scale consists of five items available in three languages, including German, Chinese, and English; and captures both positive and negative attitudes towards AI. Other scales have also been introduced. For example, Aktay *et al.* [12] developed the artificial intelligence attitudes scale (AIAS), which includes 13 items covering the perceived benefits, risks, and uses of AI. Similarly, Schepman and Rodway [13] introduced the general attitudes towards artificial intelligence scale (GAAIS), a 20-item instrument with a two-factor structure. The first factor measures positive attitudes, such as perceived utility, desired use, and positive emotions. The second factor measures negative attitudes, such as concerns about job loss, ethical issues, and negative emotions.

In the field of education, several scales have been developed to assess teachers’ attitudes towards artificial intelligence. The Teachers’ Perception Scale Towards the Use of Artificial Intelligence Tools in Education, developed by Işık *et al.* [14], aims to measure teachers’ perceptions of AI tool use in educational settings. It is a 5-point Likert scale consisting of 37 items divided into three factors, including competence (22 items related to knowledge, skills, and application), anxiety (8 items related to negative effects, boredom, and worry), and usefulness (7 items related to benefits, guidance, problem-solving, and productivity). In addition, the teachers’ attitudes toward AI in education (TATAE) scale was developed and validated by Fatalaki *et al.* [3] to assess EFL teachers’ attitudes toward AI and its integration into educational practices. The final validated version comprises 28 items across five major dimensions: Interest, intention to use, ethical concerns, usefulness for learners, and usefulness for teachers. notably, this scale incorporates ethical

considerations, which are not explicitly included in many other existing scales. This scale was designed based on the three-component model of Newcomb *et al.* [11] and technology acceptance model, the scale is claimed to measure the comprehensive attitudes towards AI integration in education.

2.4. Related studies

Several studies across diverse teaching fields have examined teachers' and educators' attitudes toward the integration of AI in education. Overall, findings suggest that teachers generally hold positive views of AI's potential, while also recognizing significant challenges. Aghaziarati *et al.* [15] conducted a qualitative study with 25 teachers from different subject areas, identifying two key impacts of AI in education, namely enhancing learning outcomes through personalization, immediate feedback, adaptive assessment, and increased engagement; and fostering collaboration, learner autonomy, and creative thinking. A recurring theme was the challenge of effectively integrating AI into existing curricula. Similarly, Zormanová [16] explored Czech teachers' perspectives through interviews with five participants. While teachers expressed concerns about cheating and plagiarism, they also viewed AI integration as inevitable and valued its potential to reduce workload, save time, and improve teaching efficiency. Importantly, they emphasized teachers' roles in guiding responsible AI use and adapting pedagogical methods. In the same year, in a qualitative design study with participants, Uygun [17] investigated educators' perceptions across four dimensions of benefits, drawbacks, scope, and definitions of AI. Results revealed optimism about AI's capacity to support individualized learning, enhance productivity, save time, and contribute to efficiency. Likewise, Stryttoy *et al.* [18] examined science teachers' attitudes and self-efficacy through an intervention involving AI integration and lesson design. Findings suggested that teachers were willing to expand their use of AI in classroom practice.

At the same time, research also highlights teachers' concerns and resistance. Chounta *et al.* [19], in a study with 140 Estonian teachers, reported positive perceptions of AI's role in structuring lessons, evaluating assignments, and improving productivity. However, participants also raised concerns about the time needed to master AI tools, trust in AI systems, and the potential erosion of human qualities such as communication, creativity, and empathy. Similarly, Alwaqdan [2] surveyed 1,101 Saudi teachers and found recognition of AI's potential for designing engaging activities, personalizing learning, and reducing workload. Nevertheless, respondents expressed worries about job security, diminished creativity and critical thinking, and ethical challenges.

Within the EFL field, researchers have also explored teachers' attitudes toward AI. Sütçü and Sütçü [7] employed a mixed-method design with 35 English teachers, using an adapted Turkish version of the GAAIS alongside open-ended questions. Findings indicated generally positive attitudes that teachers wished to incorporate AI into lessons and believed it could reduce workload and assist with preparation, while also stressing that AI could not replace teachers. They also acknowledged potential benefits for learners, including greater motivation, autonomy, and language development. At the same time, concerns were raised about job loss and the devaluation of human effort. Similarly, Hieu and Thao [20] investigated Vietnamese teachers' use of ChatGPT in fairy tale retelling tasks with nine participants. Teachers expressed concerns over over-reliance on AI and ethical issues but also recognized opportunities for enhanced engagement, personalization, critical thinking, creativity, and reduced workload.

In sum, research suggests that teachers generally hold positive attitudes toward AI in education, recognizing its ability to reduce workload, transform teaching and assessment practices, personalize learning, and foster creativity, engagement, and improve outcomes. However, these studies also underscore persistent concerns regarding ethical risks, over-dependence, and the potential loss of human-centered qualities. Importantly, teachers consistently highlight their responsibility to guide students in using AI responsibly and ethically. Although several studies have investigated teachers' attitudes toward AI, limited research has focused on the private school context. This study aims to fill this gap by examining the attitudes of private school EFL teachers towards the use of AI in education. To fulfill the purpose of the study, the survey was seeking to answer the following research question: what are the attitudes of EFL teachers in private school towards the use of AI in education?

3. METHOD

The study employed a convergent mixed-method design, in which both quantitative and qualitative data were collected independently [21]. The study was conducted at a private multi-level school established in 2019 in Vietnam. The school offers four levels of education, including kindergarten, primary, secondary, and high school. This site was selected for several reasons. First, one of the researchers was working at the school, which facilitated access to participants. Second, the multi-level school model is relatively uncommon in Vietnam; although the school is managed by the provincial Department of Education, it integrates an additional curriculum that allows students to choose between the Vietnamese curriculum and the Pearson curriculum. Third, technology integration is one of the school's management priorities. As a result, teachers regularly participate in professional development programs on technology and AI tools for education. Thus, AI is not a new concept within this school.

3.1. Participants

The participants of this study were 15 EFL teachers from a private multi-level school. They were between 25 and 35 years old, with 2 to 10 years of English teaching experience. Some participants had worked in other educational institutions before joining this school, while others began their teaching careers here and have remained for several years. All teachers were required to take part in a training program before starting work. The program included sessions on the school's teaching philosophy, pedagogy, and technology integration. All the participants used AI to support their teaching and working process. The participants were all graduated from universities of Education majoring in teaching English as second language. There were 4 males and 11 females.

3.2. Instrument

The questionnaire used in this study was adapted from the work of Fatalaki *et al.* [3] because the work was specifically designed for EFL teachers, who were the focus of this research. It consisted of three sections. The first section introduced the aim of the study and collected demographic information about the participants. The second section was designed to collect quantitative data and was adapted from the original questionnaire [3]. This instrument had previously been validated with 569 EFL teachers who had at least one year of teaching experience in different schools. From the initial 41 items, the questionnaire was refined through a reliability check (Cronbach's $\alpha=0.87$). After conducting both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) and removing unsuitable items, the final version consisted of 28 items across five dimensions, including interest, ethical concerns, intention to use, usefulness for teachers, and usefulness for learners. Specifically, ethical concerns were measured with 6 items, intention to use with 5 items, usefulness for teachers with 5 items, and usefulness for learners with 6 items. In addition, three items were purposively designed as reverse-coded items. This section used a 5-point Likert scale to measure attitudes, where 5 refers to strongly agree, 4 refers to agree, 3 refers to neutral, 2 refers to disagree, and 1 refers to strongly disagree. The third section focused on collecting qualitative data. In line with Fatalaki *et al.*'s [3] recommendation to incorporate open-ended questions for richer insights, five open-ended questions were developed, each corresponding to one of the five dimensions of the questionnaire.

3.3. Data collection and analysis

The questionnaire was transferred to Google Forms and distributed to all EFL teachers at the target school through the personal contacts of one researcher. To ensure that participants did not skip any items, the multiple-choice questions were set as required, while the open-ended questions were optional. After one week, 15 out of 20 EFL teachers working in the school responded, of whom 11 answered the open-ended questions.

The researcher carefully reviewed the responses and decided to exclude one participant's data because the answers were too brief for analysis. Therefore, the quantitative data were analyzed with 15 participants, while the qualitative data were analyzed with 10 participants. Given the homogeneous nature of the participant group, a sample size of 15 was considered sufficient, as the quantitative component was intended for exploratory, descriptive purposes rather than for inferential generalization.

The quantitative data were transferred into SPSS. Since Google Forms provided the percentage of each item, the researcher used these percentages to check for any mistakes during the data transfer. When all percentages matched, the reversed items were recoded back to align with the other items. Cronbach's alpha coefficients indicated good internal consistency [22] for interest ($\alpha=0.81$), ethical concerns ($\alpha=0.75$), intention to use ($\alpha=0.86$), usefulness for teachers ($\alpha=0.93$), and usefulness for students ($\alpha=0.75$). The questionnaire data were interpreted using the scale presented by Pimentel [23]. Concretely, 1.00-1.80 interpreted as Strongly Disagree, 1.81-2.60 interpreted as Disagree, 2.61-3.40 interpreted as Neutral, 3.41-4.20 interpreted as Agree, and 4.21-5.00 interpreted as Strongly Agree. Each teacher who responded to the questionnaire was assigned a number, and their personal information was removed to make it easier for the researchers to organize the data files while ensuring the participants' confidentiality. The qualitative data were analyzed using the steps of hybrid coding adapted from Swain [24]. The detailed steps are presented in Figure 1.

The coding process was conducted by two coders. The a priori themes were based on the five aspects of the questionnaire. The two coders worked independently and regularly discussed the posteriori codes. The percentage agreement was 97%, and Cohen's kappa was $\kappa=0.90$, $p<0.001$, indicating almost perfect agreement [25]. The researchers then discussed and finalized the codes and themes.

The results from the quantitative survey were triangulated with the qualitative coding was the final step of data analysis. Specifically, the coders compared participants' open-ended responses with the corresponding quantitative scores to examine areas of convergence and divergence. This systematic comparison allowed the researchers to validate and enrich the quantitative findings, ensuring that both sets of data complemented and informed each other.

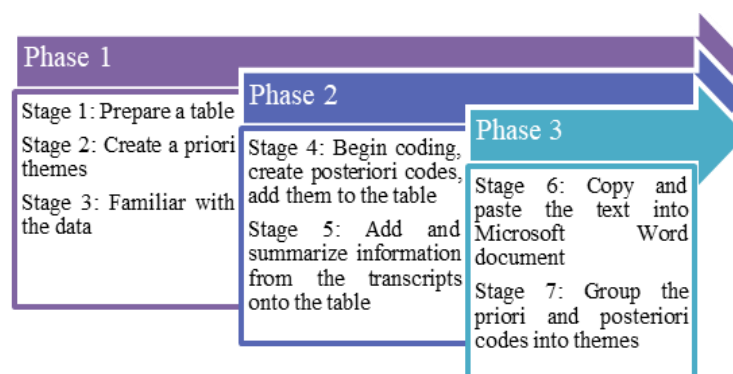


Figure 1. Qualitative coding steps

4. RESULTS AND DISCUSSION

4.1. Results

The details of the mean and standard deviation of each item are listed in Table 1. The interest aspect obtained the highest mean score ($M=4.26$, $SD=0.68$), indicating that teachers demonstrated a strong interest in the use of AI in education. In particular, they expressed a desire to receive further training on AI and its applications ($M=4.33$, $SD=0.72$). Teachers also acknowledged AI as an important field in education; they were motivated by its potential and reported a willingness to integrate new technologies into their practice following appropriate training ($M=4.27$, $SDs=1.03$, 0.80 , 1.16). Moreover, teachers recognized AI as an increasingly important component of education and considered its integration into curriculum and syllabus development ($M=4.20$, $SDs=0.77$, 1.08). These findings were reinforced by qualitative data, with nine out of ten teachers emphasizing AI's growing importance in contemporary teaching. For instance, teacher 2 reflected: *"I feel like I have a partner by my side helping me prepare and sparking my creativity."* Similarly, another participant highlighted the need to consider *"the potential of AI in curriculum building."*

Table 1. Findings from the questionnaire

Dimensions	Items	Mean	SD
Interest	1. AI is an important field of study	4.27	1.03
	2. The tendency to receiving more AI and its application in teaching training	4.33	0.72
	3. AI became an important part of education	4.20	0.77
	4. The untapped potential of AI motivates teachers to apply it in practice	4.27	0.8
	5. The willingness to use new technology in the teaching practice after the training	4.27	1.16
	6. The consideration of potential of AI in curriculum and syllabus development	4.20	1.08
Overall		4.26	0.68
Ethical concerns	7. AI is not a threat to teachers and language education	4.07	0.46
	8. The possibility of replacing teachers of AI	4.33	0.62
	9. The increase of efficiency and accuracy of evaluation technique	4.13	0.74
	10. The introduction of new standards can reduce the threat of AI	4.20	0.77
	11. The acceptance of AI as two-side effect on learners' critical thinking	3.93	0.70
	12. The ability of using AI-powered tutoring platform	4.07	0.59
Overall		4.12	0.44
Intention to use	13. The use of AI-powered tutoring platforms.	3.87	0.99
	14. The use of AI adaptive learning applications in teaching	3.60	1.24
	15. The evaluation of educational materials by AI system	4.07	0.59
	16. The use of AI technology for warm-up activities	4.13	1.13
	17. The use of AI tutoring systems for post teaching activities	4.27	0.59
Overall		3.99	0.76
Usefulness for teachers	18. The ability to use AI to present multimedia content in teaching context	4.07	1.1
	19. AI helps to engage students in meaning tasks	4.07	1.16
	20. AI helps to provide students with real-time feedback	4.33	0.72
	21. AI helps teachers to find effective strategies for teaching	4.13	1.06
	22. The use of AI to update information about pedagogical practices	4.33	0.62
	Overall	4.19	0.84
Usefulness for learners	23. The personalized instruction for students	4.07	0.8
	24. The meeting of learner's diverse needs	3.93	1.16
	25. AI helps to learning at learners' own pace	4.13	0.74
	26. The ability to use AI as a supplementary tool	3.87	1.25
	27. The improvement of English language skills	4.13	0.74
	28. Regular checking of learners' progress	4.20	0.41
Overall		4.06	0.6

Teachers also reported a high level of perceived usefulness ($M=4.19$, $SD=0.84$). They agreed that AI was beneficial for providing students with real-time feedback and for updating information on pedagogical practices, with the highest score in this dimension ($M=4.33$, $SDs=0.72$, 0.62). The second-highest mean score in this category ($M=4.13$, $SD=1.06$) corresponded to the statement that AI helps teachers identify effective teaching strategies. Additionally, the use of AI for presenting multimedia content and engaging students in meaningful tasks shared the same mean score ($M=4.07$, $SDs=1.10$, 1.16). These quantitative findings aligned with qualitative responses, where all interviewees recognized AI's usefulness for teachers across three primary areas. First, engaging lesson design, six teachers explained that AI assists in creating meaningful and interactive activities. For example, teacher 6 stated, *"AI helps me design interactive activities like role-plays, vocabulary games, or speaking prompts that make lessons more engaging."* Similarly, teacher 8 observed, *"AI helps make my lessons more interactive and engage students in new ways."* Second, real-time feedback, eight teachers valued AI's ability to monitor learning and provide immediate responses. Teacher 9 remarked, *"AI assists in providing real-time feedback on students' performance,"* while teacher 3 emphasized its usefulness in *"giving instant feedback on students' writing."* Third, work support, all teachers stressed AI's role in lesson planning and classroom management, including tracking student progress, generating questions and worksheets, creating immersive communication scenarios, and recommending resources aligned with learning objectives. Teachers 5, 7, and 8 further highlighted AI's capacity to save time by automating repetitive tasks and providing up-to-date pedagogical information.

Ethical concerns ranked third ($M=4.12$, $SD=0.44$). Teachers largely agreed that AI would not replace educators ($M=4.33$, $SD=0.62$) and believed it could enhance the efficiency and accuracy of evaluation methods ($M=4.13$, $SD=0.74$). They also supported the introduction of new standards to mitigate potential risks ($M=4.20$, $SD=0.77$). Furthermore, items addressing AI's non-threatening role in language education and its potential as a tutoring platform received similar ratings ($M=4.07$, $SDs=0.46$, 0.59). The lowest agreement within this aspect was for the item suggesting that AI exerts a dual influence on students' critical thinking ($M=3.93$, $SD=0.70$). Qualitative data reinforced these findings, with six teachers underlining that AI complements rather than threatens language education. As teacher 7 explained, *"AI is a valuable support rather than a replacement for educators."* Teacher 8 further emphasized, *"It should be used wisely to enhance, not replace, human interaction in the classroom."* Similarly, Teacher 3 described AI as *"A supportive partner, not a replacement, ensuring that technology enhances creativity, efficiency, and student engagement while keeping the human connection at the core of my teaching."*

The dimension of usefulness for students ranked fourth ($M=4.06$, $SD=0.60$). Teachers agreed that AI could help students monitor progress ($M=4.20$, $SD=0.41$) and facilitate learning at their own pace while improving English skills ($M=4.13$, $SDs=0.74$). They also recognized AI's ability to provide personalized instruction ($M=4.07$, $SD=0.80$). Although lower mean scores were observed for items addressing AI's ability to meet diverse learner needs ($M=3.93$, $SD=1.16$) and function as a supplementary tool ($M=3.87$, $SD=1.25$), the overall results still reflected positive teacher attitudes. Qualitative data supported this finding. Teachers highlighted four main benefits of AI for students, including personalized instruction, self-paced learning, supplementary learning, and language skill development. For example, teacher 7 noted, *"AI provides students with tailored exercises and feedback to meet their individual needs."* Teacher 2 added that AI *"adjusts activities to a learner's proficiency level,"* while teacher 5 emphasized the design of *"Interactive activities that match their level and interests."* Regarding self-paced learning, three teachers valued AI's capacity to allow learners to progress at their own speed, *"Building confidence while improving their skills at their own pace."* Teacher 10 further pointed to AI's value for supplementary practice beyond the classroom, while five participants highlighted its contribution to English language development, particularly in reading and writing.

Finally, the aspect of intention to use received the lowest, though still positive, mean score ($M=3.99$, $SD=0.76$). Within this category, the strongest agreement was with the statement regarding the use of AI tutoring systems for post-teaching activities ($M=4.27$, $SD=0.59$). This was followed by AI's use in warm-up activities ($M=4.13$, $SD=1.13$) and in evaluating educational materials ($M=4.07$, $SD=0.59$). Lower mean scores were found for items on using AI-powered tutoring platforms ($M=3.87$, $SD=0.99$) and adaptive learning applications ($M=3.60$, $SD=1.24$), though these still indicated overall agreement. Qualitative analysis confirmed these results, seven participants expressed their intention to adopt more AI-driven adaptive learning tools in their teaching. ChatGPT was the most frequently mentioned application, particularly for preparing lessons, activities, and materials. Teacher 8 also emphasized AI's administrative potential. Collectively, these findings suggest a generally positive orientation toward experimenting with AI in everyday pedagogical practice.

In addition to the positive attitudes reported, teachers also expressed certain negative perspectives through the qualitative data. First, participants identified barriers to the use of AI in teaching. Two teachers described challenges associated with integrating AI into their practice. Teacher 10 admitted feeling *"confused and tired"* when using AI, describing herself as *"quite lost"* amid the overwhelming volume of information. Similarly, teacher 9 expressed frustration that *"Teachers have to waste more time to train an AI to produce the*

exact results we want." These accounts suggested that cognitive overload and time inefficiency may hinder effective adoption. Second, teachers highlighted potential harms for educators. Concerns were raised regarding professional overreliance on AI. Teacher 3 cautioned that teacher's risk *"Losing creativity and not being able to come up with backup support in case of need."* This observation underscores the possibility of diminished professional autonomy if educators depend excessively on AI-generated outputs. Third, participants reported potential harms for students. Six teachers voiced concerns about learners becoming overly dependent on AI. As Teacher 1 warned, *"Students become overly dependent on it for completing assignments."* Teacher 7 elaborated that *"If learners use AI to write essays or solve problems without understanding the process, they may get good-looking results but miss the opportunity to actually build their skills."* Risks of misinformation were also emphasized. Teacher 3 cautioned that AI could *"Spread misinformation or reinforce stereotypes."* Furthermore, concerns were raised about the potential loss of human connection in the classroom. As Teacher 4 emphasized, *"Education is not just about information; it's also about relationships, motivation, and emotional support. If AI replaces too much of the teacher-student interaction, learning could become impersonal."* In addition, Age-appropriateness was another issue, with Teacher 5 stating he *"Would not use AI to teach students younger than 7."*

4.2. Discussion

The study sought to investigate the attitudes of the EFL teachers towards the use of AI in education. The results of the questionnaire and open-ended questions showed that, although teachers reported a generally high level of positive attitudes toward the use of AI in education, they also expressed certain concerns that should be taken into account. Through the lens of Newcomb *et al.* [11], cognitive, affective, and behavioral dimension of attitudes were demonstrated through the findings of the study.

Cognitively, teachers acknowledged the usefulness of AI for both teachers and students in the teaching and learning process. This finding was consistent with previous studies [2], [15]–[17], [19], which emphasized AI's contribution to teacher productivity in areas such as material development, lesson planning, testing and evaluation, and administrative work. Teachers also noted AI's benefits for students, particularly in providing personalized instruction, supporting self-paced learning, and improving language skills. At the same time, they raised concerns about potential harms, including reduced creativity, overreliance on AI, misinformation, and the loss of human interaction in the classroom. These concerns parallel the findings of Hieu and Thao [20], who also reported teachers' worries about excessive dependence on AI. Importantly, the finding of the study raised a significant question of reflection about the suitable age to use AI. Affectively, teachers demonstrated strong interest in using AI in education as well as the potential of using AI in curriculum development, a result that supports Uygun's [17] conclusion that teachers were optimistic about AI's potential to enhance educational quality. However, some teachers also described negative emotions such as confusion and frustration when confronted with the overwhelming and diverse information produced by AI. As this dimension has not been widely reported in prior studies, it highlights the need for targeted support to address teachers' emotional responses and ensure that AI adoption does not create unnecessary stress or cognitive overload. Behaviorally, teachers expressed a relatively high level of intention to use AI in their professional practice. This aligns with the findings of Stryftoy *et al.* [18] and Sütçü and Sütçü [7], who showed that teachers were willing to incorporate more AI into their teaching. Nevertheless, the lower mean score for intention compared to interest and usefulness suggests that teachers may adopt AI cautiously, balancing enthusiasm with concerns about its potential drawbacks.

The present findings did not permit a definitive conclusion regarding threshold effects in teachers' attitudes toward AI; however, the observed patterns suggest that such attitudes may vary depending on the degree of pedagogical control and the stakes associated with different uses. Teachers appeared more accepting of AI in instructional, low-stakes applications (e.g., lesson planning, real-time feedback, and classroom activities), where they retained substantial pedagogical agency and could contextualize or override AI-generated outputs. In contrast, more cautious attitudes emerged in scenarios involving reduced autonomy, greater reliance on AI, or more directive and evaluative roles, particularly in relation to assessment-related practices. The comparatively lower levels of intention to use more autonomous AI-powered systems further suggest that acceptance may diminish as AI assumes greater control or consequence. Taken together, these patterns point toward possible threshold-like dynamics, whereby teachers' generally positive attitudes may become more conditional when pedagogical control is reduced or assessment stakes are heightened.

These findings can also be interpreted through a distinction between instrumental and normative endorsement of AI. Teachers' positive attitudes appeared to be primarily instrumental, reflecting strong appreciation for AI's practical benefits, including efficiency, time-saving, and support for instructional tasks. However, normative endorsement, defined in terms of perceived pedagogical appropriateness and educational legitimacy, remained more tentative. This was reflected in concerns about overreliance, diminished creativity and critical thinking, loss of human interaction, and the appropriateness of AI use for younger learners. Such concerns were particularly salient in assessment-related contexts, where issues of academic integrity and

authorship become more pronounced. Teachers expressed reservations about students' reliance on AI for completing assignments, raising questions about originality, authenticity, and the development of individual voice in EFL learning. Together, these findings suggest that while AI is widely accepted as a supportive instructional tool, its integration into evaluative and high-stakes contexts remains more contested. This highlights the need for future research to examine how different dimensions of teacher attitudes interact across contexts, particularly in relation to pedagogical control, ethical considerations, and emerging norms of assessment and authorship in AI-mediated language education.

In short, despite the mixed perspectives reflected in the cognitive and affective dimensions, EFL teachers demonstrated a strong intention to use AI in their teaching and professional practice. A possible explanation for this high level of positivity is that the teachers in this study were not new to AI and its use in education. Regular training on technology, especially AI applications in education, had familiarized them with AI and fostered their cognitive acceptance of its usefulness for both teachers and students. The practical use of AI in their work revealed both positive and negative aspects, which resulted in mixed affective responses, teachers were simultaneously interested and concerned. The combination of cognitive acceptance and positive affect led to a relatively high level of behavioral intention to use AI in the future.

5. CONCLUSION

Overall, the attitudes of private school EFL teachers towards AI were multidimensional, encompassing cognitive beliefs about its usefulness, affective responses of both enthusiasm and frustration, and behavioral intentions to integrate AI selectively into teaching. Stakeholders should recognize these dimensions to design more effective strategies for AI integration in education. Specifically, professional development programs should provide both technical and emotional support to help teachers adopt AI effectively. Clear guidelines and age-appropriate policies are also needed to address ethical concerns such as overreliance, misinformation, and reduced human interaction. In addition, frameworks for curriculum integration should ensure that AI enhances rather than replaces pedagogical practices.

Although efforts were made to validate the results of this study, certain limitations must be acknowledged. First, the small sample size restricts the generalizability of the findings; however, as the quantitative component was used primarily for the exploratory purpose, and was complemented by qualitative data, the study still provides meaningful insights within its specific context. Second, the open-ended questions may not have fully captured the diversity of teachers' experiences and perspectives. Future research should therefore involve larger and more diverse samples and employ multiple data collection methods to provide a more comprehensive understanding of teachers' attitudes toward AI in education.

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Tran Thi Thanh Huong	✓			✓		✓				✓				
Cao Xuan Hieu						✓	✓			✓	✓			✓

C : **C**onceptualization

M : **M**ethodology

So : **S**oftware

Va : **V**alidation

Fo : **F**ormal analysis

I : **I**nterpretation

R : **R**esources

D : **D**ata Curation

O : **O**rganizing - **O**riginal Draft

E : **E**dit - **E**dit

Vi : **V**isualization

Su : **S**upervision

P : **P**roject administration

Fu : **F**unding acquisition

CONFLICT OF INTEREST STATEMENT

Authors state no conflict of interest.

INFORMED CONSENT

We have obtained informed consent from all individuals included in this study.

ETHICAL APPROVAL

The research related to human use has been complied with all the relevant national regulations and institutional policies in accordance with the tenets of the Helsinki Declaration and has been approved by the authors' institutional review board or equivalent committee.

DATA AVAILABILITY

Derived data supporting the findings of this study are available from the corresponding author, [TTNP], on request.

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